

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

CORE WIRELESS LICENSING	§	
S.A.R.L.,	§	Case No. 2:14-cv-911-JRG-RSP
	§	(lead)
v.	§	
	§	Case No. 2:14-cv-912-JRG-RSP
LG ELECTRONICS, INC., AND LG	§	
ELECTRONICS MOBILECOMM	§	
U.S.A., INC.	§	

REPORT AND RECOMMENDATION

Before the Court is LG's¹ Motion for Summary Judgment of Invalidity Pursuant to 35 U.S.C. §§ 101 and 112 Regarding U.S. Patent No. 7,804,850. (Dkt. No. 276; "Motion for Summary Judgment"). Core² opposes the Motion for Summary Judgment.

Core asserts infringement of a single claim of the '850 Patent in Case No. 2:14-cv-912. See (Dkt. No. 511). That claim is reproduced here:

21. An apparatus comprising:

a memory adapted to store computer program instructions and a virtual transmission time interval;

a wireless transceiver;

a processor adapted to:

check to determine whether the apparatus is transmitting data packets in a current air interface transmission time interval; and

for the case where it is determined that the apparatus is not transmitting in the current air interface transmission time interval, to cause the transmitter to transmit a next data packet after a predetermined period associated with the virtual transmission time interval has elapsed, wherein the next data packet comprises at least one protocol data unit and the virtual transmission time interval is an integer multiple of the current air interface transmission time interval.

¹ "LG" is Defendants LG Electronics, Inc. and LG Electronics Mobilecomm U.S.A., Inc.

² "Core" is Plaintiff Core Wireless Licensing S.a.r.l.

I. LAW

A. Summary Judgment

Summary judgment should be granted “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). Any evidence must be viewed in the light most favorable to the nonmovant. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986) (citing *Adickes v. S.H. Kress & Co.*, 398 U.S. 144, 158–59 (1970)). Summary judgment is proper when there is no genuine issue of material fact. *Celotex v. Catrett*, 477 U.S. 317, 322 (1986). “By its very terms, this standard provides that the mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact.” *Anderson*, 477 U.S. at 247–48. The substantive law identifies the material facts, and disputes over facts that are irrelevant or unnecessary will not defeat a motion for summary judgment. *Id.* at 248. A dispute about a material fact is “genuine” when the evidence is “such that a reasonable jury could return a verdict for the nonmoving party.” *Id.*

The moving party must identify the basis for granting summary judgment and identify the evidence demonstrating the absence of a genuine issue of material fact. *Celotex*, 477 U.S. at 323. If the moving party does not have the ultimate burden of persuasion at trial, the party “must either produce evidence negating an essential element of the nonmoving party’s claim or defense or show that the nonmoving party does not have enough evidence of an essential element to carry its ultimate burden of persuasion at trial.” *Nissan Fire & Marine Ins. Co., Ltd. v. Fritz Cos., Inc.*, 210 F.3d 1099, 1102 (9th Cir. 2000). “As a general rule, summary judgment is inappropriate where an expert’s testimony supports the non-moving party’s case.” *Vasudevan Software, Inc. v.*

MicroStrategy, Inc., 782 F.3d 671, 683 (Fed. Cir. 2015) (quoting *Provenz v. Miller*, 102 F.3d 1478, 1490 (9th Cir. 1996)).

B. Enablement and Written Description

“The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same.” 35 U.S.C. § 112(a). The Federal Circuit has consistently held that this statute sets forth two separate and distinct requirements, known as “enablement” and “written description.” *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). Although distinct, the doctrines of written description and enablement are related and “often rise and fall together.” *Id.* at 1352. Both issues are routinely tried to a jury. *See, e.g., Enzo Biochem, Inc. v. Applera Corp.*, 780 F.3d 1149, 1153 (Fed. Cir. 2015) (“The case then proceeded to a jury trial, where the jury found that the ... patent was not invalid for lack of written description and enablement.”)

To prove that a claim is invalid for lack of enablement, a challenger must show by clear and convincing evidence that a person of ordinary skill in the art would not be able to practice the claimed invention without “undue experimentation.” *Allergan, Inc. v. Sandoz Inc.*, 796 F.3d 1293, 1309 (Fed. Cir. 2015) (citing *In re Wands*, 858 F.2d 731, 736–37 (Fed. Cir. 1988)). “A claim is sufficiently enabled even if ‘a considerable amount of experimentation’ is necessary, so long as the experimentation ‘is merely routine, or if the specification in question provides a reasonable amount of guidance with respect to the direction in which the experimentation should proceed.’” *Vasudevan Software*, 782 F.3d at 684 (quoting *In re Wands*, 858 F.2d at 737).

Although “an inoperable invention is not enabled ... the party asserting inoperability must show that all disclosed alternatives are inoperative.” *CFMT, Inc. v. YieldUp Int’l Corp.*, 349 F.3d

1333, 1339 (Fed. Cir. 2003) (emphasis added); *see also Emi Grp. North Am. v. Cypress Semiconductor Corp.*, 268 F.3d 1342, 1348–49 (Fed. Cir. 2001) (“A claimed invention having an inoperable or impossible claim limitation may lack utility under 35 U.S.C. § 101 and certainly lacks an enabling disclosure under 35 U.S.C. § 112. . . . [but even] if some of the claimed combinations were inoperative, the claims are not necessarily invalid . . . the party alleging inoperability must show that each disclosed embodiment in the patents was impossible or not enabled.”); *Newman v. Quigg*, 877 F.2d 1575, 1582 (Fed. Cir. 1989) (claims to a perpetual motion machine were invalid because the specification did not enable any embodiment). Whether a claim satisfies the enablement requirement of 35 U.S.C. § 112 is a question of law reviewed without deference, although the determination may be based on underlying factual findings, which are reviewed for clear error. *Alcon Research Ltd. v. Barr Labs., Inc.*, 745 F.3d 1180, 1188 (Fed. Cir. 2014). The party asserting non-enablement bears the burden of proof by clear and convincing evidence. *See id.* at 1189–90.

“The test for the sufficiency of the written description ‘is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.’” *Vasudevan Software*, 782 F.3d at 682 (quoting *Ariad*, 598 F.3d at 1351). “[T]he test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed.” *Ariad*, 598 F.3d at 1351. Whether a patent complies with the written description requirement is a question of fact. *Id.* “A party must prove invalidity for lack of written description by clear and convincing evidence.” *Vasudevan Software*, 782 F.3d at 682.

C. Subject Matter Eligibility

Section 101 of the Patent Act defines what is eligible for patent protection: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101.

The Supreme Court has held that there are three specific exceptions to patent eligibility under § 101: laws of nature, natural phenomena, and abstract ideas. *Bilski v. Kappos*, 561 U.S. 593, 601 (2010). In *Mayo*, the Supreme Court set out a two-step test for “distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)).

The first step of *Mayo* requires a court to determine if the claims are directed to a law of nature, natural phenomenon, or abstract idea. *Alice*, 134 S. Ct. at 2355. “If not, the claims pass muster under § 101.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714 (Fed. Cir. 2014). In making this determination, the court looks at what the claims cover. *Ultramercial*, 772 F.3d at 714 (“We first examine the claims because claims are the definition of what a patent is intended to cover.”); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015) (“At step one of the *Alice* framework, it is often useful to determine the breadth of the claims in order to determine whether the claims extend to cover a ‘fundamental … practice long prevalent in our system …’” (quoting *Alice*, 134 S. Ct. at 2356)).

For example, in *Bilski*, the Supreme Court rejected as a patent-ineligible “Claims 1 and 4 in petitioners’ application” because the claims simply “explain[ed] the basic concept of hedging, or

protecting against risk.” *Bilski*, 561 U.S. at 611. Similarly, in *Ultramercial*, the Federal Circuit rejected as patent-ineligible a claim that included “eleven steps for displaying an advertisement in exchange for access to copyrighted media.” *Ultramercial*, 772 F.3d at 714. In *Intellectual Ventures*, the Federal Circuit rejected as a patent-ineligible a claim that recited components that “relate[d] to customizing information based on (1) information known about the user and (2) navigation data.” *Intellectual Ventures*, 792 F.3d at 1369. However, when performing this step, the Court “cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon—after all, they take place in the physical world.” *Enfish, LLC v. Microsoft Corp.*, 2016 U.S. App. LEXIS 8699 at *10 (Fed. Cir. May 12, 2016).

A court applies the second step of *Mayo* only if it finds in the first step that the claims are directed to a law of nature, natural phenomenon, or abstract idea. *Alice*, 134 S. Ct. at 2355. The second step requires the court to determine if the elements of the claim individually, or as an ordered combination, “transform the nature of the claim” into a patent-eligible application. *Alice*, 134 S. Ct. at 2355. In determining if the claim is transformed, “[t]he cases most directly on point are *Diehr* and *Flook*, two cases in which the [Supreme] Court reached opposite conclusions about the patent eligibility of processes that embodied the equivalent of natural laws.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1298 (2012); *see also Alice*, 134 S. Ct. at 2355 (“We have described step two of this analysis as a search for an ‘inventive concept.’”).

In *Diehr*, the Court “found [that] the overall process [was] patent eligible because of the way the additional steps of the process integrated the equation into the process as a whole.” *Mayo*, 132 S. Ct. at 1298 (citing *Diamond v. Diehr*, 450 U.S. 175, 187 (1981)); *see also Mayo*, 132 S. Ct.

at 1299 (“It nowhere suggested that all these steps, or at least the combination of those steps, were in context obvious, already in use, or purely conventional.”). In *Flook*, the Court found that a process was patent-ineligible because the additional steps of the process amounted to nothing more than “insignificant post-solution activity.” *Diehr*, 450 U.S. at 191–92 (citing *Parker v. Flook*, 437 U.S. 584 (1978)).

A claim may become patent-eligible when the “claimed process include[s] not only a law of nature but also several unconventional steps … that confine[] the claims to a particular, useful application of the principle.” *Mayo*, 132 S. Ct. at 1300; *see also DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (“In particular, the ‘399 patent’s claims address the problem of retaining website visitors that, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host’s website after ‘clicking’ on an advertisement and activating a hyperlink.”); *BASCOM Global Internet Servs. v. AT&T Mobility LLC*, 2016 U.S. App. LEXIS 11687 at *15 (Fed. Cir. June 27, 2016) (“some inventions’ basic thrust might more easily be understood as directed to an abstract idea, but under step two of the Alice analysis, it might become clear that the specific improvements in the recited computer technology go beyond ‘well-understood, routine, conventional activit[ies]’ and render the invention patent-eligible”); *but see Enfish*, 2016 U.S. App. LEXIS 8699 at *12 (“We do not read Alice to broadly hold that all improvements in computer-related technology are inherently abstract and, therefore, must be considered at step two.”). A claim, however, remains patent-ineligible if it describes only “[p]ost-solution activity’ that is purely ‘conventional or obvious.’” *Mayo*, 132 S. Ct. at 1299.

“The question of eligible subject matter must be determined on a claim-by-claim basis.”

Ultramercial, Inc. v. Hulu, LLC, 722 F.3d 1335, 1340 (Fed. Cir. 2013) *vacated on other grounds* 134 S. Ct. 2870 (2014).

II. ANALYSIS

In general, the ’850 Patent describes techniques to minimize interference from multiple devices transmitting simultaneously. The embodiments in the specification envision a mobile device such as a cellular telephone with a processor, a memory, and a wireless transceiver. *See* ’850 Patent at 5:59–6:27.³ In these embodiments, a base station communicates with the mobile device to schedule regular Transmission Time Intervals (“TTIs”) between subsequent data transmissions. *See id.* at 6:28–7:4. When an autonomous data transmission occurs, the ’850 Patent teaches that the rate of transmission can be “slowed down” or “decelerated” by sending the data “to the physical layer every n^* TTI, instead of once every transmission time interval (TTI).” *Id.* at 7:2–3. The ’850 Patent teaches that this deceleration can reduce the impact of autonomous transmissions on the “Rise over Thermal” (a measure of interference). *See id.* at 7:5–19.

Defendant LG moves for summary judgment that Claim 21 of the ’850 Patent is invalid as lacking sufficient enablement and written description under § 112(a) and that it is directed to patent-ineligible subject matter under § 101.

A. Enablement

LG’s arguments on the issues of enablement and written description focus on the limitation “the virtual transmission time interval is an integer multiple of the current air interface transmission time interval” and more specifically on the term “integer.” (Dkt. No. 276 at 5–7). The Court construed the term “integer” to have its plain and ordinary meaning, rejecting Core’s

³ (Dkt. No. 1-10 in Case No. 2:14-cv-911).

argument that the term should be limited to “whole number[s] greater than one.”⁴ (Dkt. No. 247 at 38–41).

LG’s argument can be divided into three parts. *First*, LG argues that when the claimed integer is equal to a negative number or zero, the claimed “virtual transmission time interval” becomes a negative time interval or a time interval of zero. Because these concepts are nonsensical, LG argues “Claim 21 is inoperable if the VTTI is 0 or negative” and these inoperative embodiments are not enabled. (Dkt. No. 276 at 4).

Second, LG argues that when the claimed integer is equal to one, claim 21 embodies the prior art (i.e. it does not slow down the rate of transmissions; it keeps the rate the same). LG cites statements from Core’s expert and a named inventor in support of this contention. (Dkt. No. 276 at 4, 6). Because “the named inventors could not have invented what they admitted to be the prior art,” LG contends this embodiment of the claim is not enabled. (*Id.* at 5–6).

Third, LG’s Motion implies that embodiments in which the claimed integer is very large (e.g. 99,999) are inoperative and therefore are not enabled. *See, e.g.* (Dkt. No. 276 at 5; Dkt. No. 315 at 2).

It is a surprisingly difficult exercise to conceive of a claim that does not encompass any inoperative embodiments. For instance, imagine a claim directed to a novel computer. This hypothetical claim does not explicitly require the computer to be supplied with electrical power (i.e. the claim has no “wherein said computer is plugged in” limitation). Such a claim encompasses a host of embodiments in which the computer is never powered on and is therefore inoperative.

⁴ Core has submitted briefing on the term “integer multiple of the current air interface transmission time interval,” arguing this term should be limited to integer multiples greater than one. *See* (Dkt. No. 524). The Court assumes for purposes of this Order that the claim broadly encompasses all integers {..., -2, -1, 0, 1, 2, ...} and integer multiples. If the claim is subsequently construed more narrowly, the outcome of this Order would be the same.

However, this does not render the claim invalid for non-enablement. It takes minimal skill and experimentation to understand that a computer needs power to operate. “[A]lthough claims may read on some inoperative embodiments, this does not necessarily invalidate the claim if the necessary information to limit the claims to operative embodiments is known to a person of ordinary skill in the art.” *Crown Operations Int’l, Ltd. v. Solutia Inc.*, 289 F.3d 1367, 1380 (Fed. Cir. 2002) (citing *Atlas Powder Co. v. E.I. du Pont De Nemours & Co.*, 750 F.2d 1569, 1576 (Fed. Cir. 1984)); *see also Alcon*, 745 F.3d at 1189 (“a patent does not need to guarantee that the invention works for a claim to be enabled”); *In re Myers*, 410 F.2d 420, 426 (C.C.P.A. 1969) (“[i]f every element in a . . . claim were required to be so specific as to exclude materials known to be inoperative and which even those not skilled in the art would not try, the claims would fail to comply with 35 U.S.C. § 112 because they would be so detailed as to obscure, rather than particularly point out and distinctly claim, the invention”).

The relevant enablement question is whether “undue experimentation” is required to identify and practice the operative embodiments. *See Atlas*, 750 F.2d at 1576; *Allergan*, 796 F.3d at 1309. LG’s Motion does not present evidence or argument that any experimentation is necessary to practice claim 21 in light of the specification. LG’s only mention of experimentation is contained in the statement “[t]he specification does not teach a person of ordinary skill in the art how to make or use an inoperable embodiment, and no amount of experimentation could remedy this problem.” (Dkt. No. 276 at 6). This is not the test for enablement. If it was, any claim that encompasses an inoperative embodiment—*e.g.* a claim that fails to remind the user to plug in the computer—would automatically be invalid.

LG analogizes this case to *LizardTech*, in which the Federal Circuit held that a patent’s description of “a particular fuel-efficient automobile engine” does not “necessarily support a broad

claim to every possible type of fuel-efficient engine, no matter how different in structure or operation from the inventor's engine." *LizardTech v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1346 (Fed. Cir. 2005). LG contends that the specification supports only a particular operable range of integers, yet claim 21 is broad enough to encompass all integers. *See* (Dkt. No. 315 at 2). However, the facts of *LizardTech* are not particularly analogous to this case. *LizardTech* was not a case about inoperable embodiments, it was a case in which a class of operable embodiments were not adequately described or enabled by the patent's specification. *See LizardTech*, 424 F.3d at 1345. Moreover, *LizardTech* held that a "claim will not be invalidated on section 112 grounds simply because the embodiments of the specification do not contain examples explicitly covering the full scope of the claim language. . . . only enough must be included to convince a person of skill in the art that the inventor possessed the invention and to enable such a person to make and use the invention without undue experimentation." *Id.*

Turning to the first part of LG's argument, LG has submitted no evidence that any experimentation is necessary to discern that the embodiments in which the claimed integer is zero or negative are inoperative embodiments. All parties and experts seem to agree that these embodiments are inoperative. *See, e.g.* (Dkt. No. 276 at 4, 6). Absent any skill or experimentation, it is easy to understand that time intervals of negative or zero duration do not exist in the real world. Accordingly, there is a material fact question as to whether any experimentation is necessary to identify these inoperative embodiments, and if so, whether this experimentation is "undue." *See Vasudevan Software*, 782 F.3d at 684 ("In determining whether experimentation is undue, *Wands* lists a number of factors to consider: 'They include (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the

relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims.’ . . . We conclude that there are genuine issues of material fact relating to several of the *Wands* factors, which, taken together, preclude summary judgment of non-enablement.”).

As for the second part of LG’s argument, no party contends that the embodiments in which the integer equals one are inoperative embodiments. Instead, LG’s argument is that these embodiments claim the prior art in which data was transmitted exactly once every transmission time interval. *See* (Dkt. No. 276 at 4). If LG can prove by clear and convincing evidence that Claim 21 is anticipated or rendered obvious by the prior art under 35 U.S.C. § 102 or § 103, then the claim is invalid. However, anticipation and obviousness have no bearing on the § 112 enablement analysis. LG has not submitted any evidence that one of ordinary skill in the art would need to experiment unduly to practice this embodiment. If this embodiment is, in fact, known in the prior art then it is unclear why a person of skill would need to experiment to practice this known embodiment. Moreover, the specification purports to describe the prior art and “conventional system architectures” as well as the alleged improvements supplied by the invention. *See, e.g.*, ’850 Patent at 6:28–7:4. Accordingly, there is at least a question of material fact on the issue of undue experimentation.

Finally, LG has not shown that large integers are not enabled by the ’850 Patent. As an initial matter, LG has not established that these embodiments are inoperative as opposed to merely impractical. There is no evidence that implementing a large integer multiple would present a special challenge or require a different technological approach than what is described in the specification. LG’s argument is simply that a large integer would create a very long delay, and this long delay would not be useful or desirable. The fact that some embodiments are not particularly

useful does not render the claim invalid for non-enablement. Whether a person of ordinary skill in the art could make and use these embodiments without undue experimentation presents a material fact question for the jury.

B. Written Description

LG's written description arguments parallel its enablement arguments, and they ultimately fail to carry LG's summary judgment burden for similar reasons. LG argues that Claim 21 lacks sufficient written description for the same three categories described *supra* (negative numbers and zero, one, and large integers) because "the named inventors of the '850 patent could not have invented or possessed inoperable embodiments" and "the named inventors could not have invented what they admitted to be the prior art." (Dkt. No. 276 at 5). LG again cites cases like *LizardTech* in which a narrow description failed to support a broad, generic claim. *See also ICU Med., Inc. v. Alaris Med. Sys.*, 558 F.3d 1368, 1379 (Fed. Cir. 2009) (affirming summary judgment of invalidity for failure to comply with the written description requirement where the specification described an invention that required a spike, but the claims covered a broader "spikeless" embodiment).

However, LG has not shown that this is a case in which the inventor described only a particular species of embodiments but claimed a broad genus. *See, e.g., id.*, 558 F.3d at 1378 ("the specification describes only medical valves with spikes" yet the claims "refer to medical valves generically"). The written description purports to describe embodiments of the invention when the claimed integer is one or greater. *See* '850 Patent at 6:28–7:4. There is no description of the inoperative negative and zero embodiments, but LG has cited no authority holding that a patent must explicitly describe inoperative embodiments. Some authority implies that inoperative embodiments are immaterial to the written description analysis. *See Alcon*, 745 F.3d at 1191 ("written description is about whether the skilled reader of the patent disclosure can recognize that

what was claimed corresponds to what was described; it is not about whether the patentee has proven to the skilled reader that the invention works, or how to make it work, which is an enablement issue”).

Compliance with the written description requirement turns on “whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Vasudevan Software*, 782 F.3d at 682. The specification is not required to contain “examples explicitly covering the full scope of the claim language. . . . only enough must be included to convince a person of skill in the art that the inventor possessed the invention.” *LizardTech*, 424 F.3d at 1345.

Failure to satisfy the written description requirement is a question of fact for which LG bears the burden of proof by clear and convincing evidence. Viewing the evidence in favor of the non-movant, there is at least a material question of fact as to whether the ’850 Patent’s disclosure of the operative embodiments is sufficient to demonstrate possession of the full scope of claim 21 to a person of ordinary skill in the art.

C. Subject Matter Eligibility

LG moves for summary judgment that the ’850 Patent claims ineligible subject matter under 35 U.S.C. § 101. LG contends that “Claim 21 is directed to the abstract idea of traffic metering.” (Dkt. No. 276 at 7). LG argues “[t]raffic metering is a basic, abstract concept. For example, freeway onramps are familiar bottlenecks for many drivers. Some freeways have adopted the use of traffic lights on these onramps to meter the flow of traffic onto the freeway. Instead of allowing cars to proceed from the onramp onto the freeway as they arrive, stoplights can inject an additional delay between cars to alleviate congestion. Claim 21 is directed to this same basic concept for packet transmissions – in particular, to modifying the time in between subsequent

transmissions by an integer multiple.” (*Id.*).

Subject matter eligibility under § 101 serves as an important check on the scope of the patent monopoly by preventing a patentee from capturing a “building block[] of human ingenuity,” “a method of organizing human activity,” a “fundamental truth,” an “idea of itself,” “an original cause,” “an algorithm,” or a similar foundational concept. *Alice*, 134 S. Ct. at 2354–57 (“the concern that drives this exclusionary principle is one of pre-emption”). The doctrine of subject matter eligibility exists to prevent patent law from “inhibit[ing] further discovery by improperly tying up the future use of these building blocks of human ingenuity.” *Id.* at 2354; *see also* *BASCOM Global Internet Servs. v. AT&T Mobility LLC*, 2016 U.S. App. LEXIS 11687 at *26–27 (Fed. Cir. June 27, 2016) (“The claims in *Intellectual Ventures I* preempted all use of the claimed abstract idea on ‘the Internet, on a generic computer.’ The claims in *Content Extraction* preempted all use of the claimed abstract idea on well-known generic scanning devices and data processing technology. The claims in *Ultramercial* preempted all use of the claimed abstract idea on the Internet. And the claims in *Accenture* preempted all use of the claimed abstract idea on generic computer components performing conventional activities.”) (citations omitted).

However, the Supreme Court has emphasized the need to “tread carefully in construing this exclusionary principle lest it swallow all of patent law.” *Alice*, 134 S. Ct. at 2354. The inquiry “cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon—after all, they take place in the physical world.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016); *see also Mayo*, 132 S. Ct. at 1293 (“For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.”).

Beginning with the first step of the *Alice* framework, the Court inquires whether claim 21 is directed to an abstract idea or, instead, to a concrete improvement in the functionality of the device itself. *See Enfish*, 822 F.3d at 1335–36 (“the first step in the Alice inquiry in this case asks whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool”). Although LG alleges that claim 21 is directed to the abstract idea of “traffic metering,” LG does not argue that claim 21 would cover all traffic metering generally or even that claim 21 would preempt all forms of traffic metering in the context of mobile device networks. While there are some parallels between LG’s freeway onramp analogy and claim 21, the claim is manifestly narrower than “traffic metering” and does not cover what happens at a freeway onramp. Claim 21 restricts its applicability to a “wireless” device with “a processor” and “a memory.” Moreover, claim 21 does not cover delaying any data transmission by any amount of time; claim 21 is limited to delaying the transmission of a “protocol data unit” (a specific type of data packet) by exactly “an integer multiple of the current air interface transmission time interval.”

Also noteworthy is the fact that claim 21 is directed to a purported improvement on an existing type of “traffic metering” in the wireless network. Claim 21 assumes by its terms that the network imposes a fixed “transmission time interval” during which data packets can be sent. The claim teaches further delaying or metering the transmission by an integer multiple of the transmission time interval. This is an archetypal example of an invention directed to “improv[ing] the functioning of the computer itself” or “improv[ing] an existing technological process” that Courts have repeatedly held to be patent-eligible. *Enfish*, 822 F.3d at 1335; *see also Alice*, 134 S. Ct. at 2351; *DDR Holdings*, 773 F.3d at 1257 (“the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer

networks”).

The Court is “not faced with a situation where general-purpose computer components are added post-hoc to a fundamental economic practice or mathematical equation.” *Enfish*, 822 F.3d at 1339. Claim 21 is directed to a specific type of packet traffic-metering that is confined to, and solves problems arising in, mobile device networks. Accordingly, the Court finds that claim 21 passes the first step of the *Alice* test because it is not directed to an abstract idea. The claim is therefore patent-eligible and the Court need not consider the second step. *Id.*

III. CONCLUSION

For the reasons set forth above, the Court **RECOMMENDS** that LG’s Motion for Summary Judgment of Invalidity (Dkt. No. 276) be **DENIED**.

A party’s failure to file written objections to the findings, conclusions, and recommendations contained in this report within fourteen days after being served with a copy shall bar that party from de novo review by the district judge of those findings, conclusions, and recommendations and, except on grounds of plain error, from appellate review of unobjected-to factual findings and legal conclusions accepted and adopted by the district court. Fed. R. Civ. P. 72(b)(2); *see Douglass v. United Servs. Auto. Ass’n*, 79 F.3d 1415, 1430 (5th Cir. 1996) (en banc).

SIGNED this 8th day of August, 2016.



ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE